\$1/15\$ POLYMORPHISMS IN THE IL4R α GENE (Accession No. AC004525)

TGTGAGCTAC	TGTGTCTGGC	CTGAATAATA	AAATTTAAAA	CAATTTTTCA	-
AAAATTCACC	ATGAGGTCTC	ACTATATTCC	CTAGGCTGGT	CTCAAACCCC	30100
TGGACTCCAA	GTGATCCACC	CCACCTTCCC	GAGTAGCTGG	GACTAGAGAT	
GCACACCATT	GCACCCAATA	GAGCAATACG	TTTCTGTTCT	TTGTAAATTA	30200
CCTGCTCTAA	GGTATTTTTG	TTATAGCAGC	CTATATGGAC	TAAGCTGACT	
TGTAACGTTA	CTTGAGACTT	TAAAGTGTTC	CGGTCACTGT	TGGAGGGCTC	30300
TGTCTGTGTT	AGCTCATTTA	ATCCCCACAA	CACCTCAATC	AGATGGGGCT	
ATTCTTAGTC	CCACTTTATA	GATAAGGAAA	CTGAGGCATG	GAAGCACAGC	30400
TTGCTCAAGG	TTCACATCTA	GTCAGTGACA	GAGCAGGTAT	TTAAACCTCA	
GGAAATAATC	AGAGAAACAT	GTGTAGAGGG	TTGTCCAAGG	AAGGCCACAT	30500
CCAGAAGCAT	CTCCCAGGAC	AGTTGTTGTG	TAGCTCACCC	TCTGGACTTT	
GTGGGTCTGG	GTGTTGTTTC	ATGATTATAG	AGAGAGCTCT	GTGAACGTGG	30600
AGGACCTGTT	GTCGGCAGAG	ACACAAATGG	CCAGGGCATG	GCTGGGCAGC	
CGCAGTGGCT	CAGGCCTGTA	ATCCCAGCAC	TTCGAGAAGA	CCAGAGGGGC	30700
AGATCATGAG	GTCAGAAGTT	CAAGACCAGC	CTGGCCAACA	TGGTGAAACC	
CCGTCTCTAC	TAAAAATACA	AAAATTAGCC	AGGTGTGGTG	GTGGGCACCT	30800
GTAATCCCAG	CTACTCGGGA	GGCTGAGGCA	GAAGAATCGC	TTGAACCCGG	
GAGGTGGAGG	TTGCAGTGAG	CTGAGATTGC	ACCACTGCAC	TCCAGCCTTG	30900
			G		
GAGACAGAGC	GAGACTCTGT	CTCGGAAAAA	CAAACAAACA	AGCAAACAAA	
CAAACAAATA	AATGGCCAGG	GCAGGGGAGG	GTTGCATATT	GAATAAGATG	31000
AGCTCTGCTG	GAAGCACAGG	TCAGCACTAA	CCTGCTTCCT	CTCTCTCTGC	
AGGTGCCTTG	GCATCTCCCA	ATGGGGTGGC	TTTGCTCTGG	GCTCCTGTTC	31100
[exon	3: 31071				
CCTGTGAGCT	GCCTGGTCCT	GCTGCAGGTG	GCAAGCTCTG	GTAAGTCACC	
	311	40]			
ACTTCTCAAT	CATTCATTTG	TTGGCTATTA	ATGGCGTGCC	AGGGTCCTGC	31200
AGTATGTCAC	CTGGCCTTAT	GGAGATTACA	CTGCAGTGGG	AGGGGACAGC	
CAATGACAAG	TGGCCCTGAT	TATCAGTAAA	TTCTAAAGAT	TGTTAGAAAG	31300
TGATGGGAGC	CGGGTGCAGT	GGCTCACACC	TGTAATCCCA	GCACTTCAGG	
AGGCCGAGGC	AGGAGGATCG	CTTGAGCCCA	GGAGTTCGAG	GTCAGCTTGG	31400
GCAACATAGG	GAGACCTTGT	CTCTACAAAT	AATAAAATAT	TAGCCAGGTG	
TGGCAGTGCA	CGCCTGTAGC	CCCAGCTACT	CAGGAGGCCG	AGGTGGGAGG	31500
ATCCCTTGAA	~~~~~~~~			AGG1GGAGG	31300
	CTCAGGAGGT	CAAGGCTGCA	GTGAACTGTG	ATCGCGCCAC	31300
TCCACTCCAG	CTCAGGAGGT	CAAGGCTGCA AAAGTGAGAC	GTGAACTGTG CCTGTCAAAA		31600
				ATCGCGCCAC	
GGTGATGGGG	CCTGCGTGAG	AAAGTGAGAC	CCTGTCAAAA	ATCGCGCCAC AAAAAGAGAA	
GGTGATGGGG GGTGGAGTGG CATTGAGCTG	CCTGCGTGAG AAAGAACACA GGGGGATTGC ACTTGGAGGA	AAAGTGAGAC GAACAGCATA AGTTGAAAGT AGCGGGAACC	CCTGTCAAAA AGAGGGGGTT AGGGAAGTCA GTGCAGATGT	ATCGCGCCAC AAAAAGAGAA GGGGAAGCTG GGGAAGGCCT CTGGGGAAGG	31600 31700
GGTGATGGGG GGTGGAGTGG CATTGAGCTG CTCATTCTTG	CCTGCGTGAG AAAGAACACA GGGGGATTGC ACTTGGAGGA GCAGAGAGGC	AAAGTGAGAC GAACAGCATA AGTTGAAAGT AGCGGGAACC CCTGCACTGA	CCTGTCAAAA AGAGGGGGTT AGGGAAGTCA GTGCAGATGT GCCTGGCGGG	ATCGCGCCAC AAAAAGAGAA GGGGAAGCTG GGGAAGGCCT CTGGGGAAGG AGGGTTGAGC	31600
GGTGATGGGG GGTGGAGTGG CATTGAGCTG CTCATTCTTG	CCTGCGTGAG AAAGAACACA GGGGGATTGC ACTTGGAGGA GCAGAGAGGC	AAAGTGAGAC GAACAGCATA AGTTGAAAGT AGCGGGAACC CCTGCACTGA	CCTGTCAAAA AGAGGGGGTT AGGGAAGTCA GTGCAGATGT	ATCGCGCCAC AAAAAGAGAA GGGGAAGCTG GGGAAGGCCT CTGGGGAAGG AGGGTTGAGC	31600 31700
GGTGATGGGG GGTGGAGTGG CATTGAGCTG CTCATTCTTG ACAGGAGGGA GGTCAGCAAG	CCTGCGTGAG AAAGAACACA GGGGGATTGC ACTTGGAGGA GCAGAGAGGC ATGTGGTGGA GTGACAGAGT	AAAGTGAGAC GAACAGCATA AGTTGAAAGT AGCGGGAACC CCTGCACTGA GGAGAGTGAG GGCTGAATCA	CCTGTCAAAA AGAGGGGGTT AGGGAAGTCA GTGCAGATGT GCCTGGCGGG CAGCAGGAGG AAAAAGACCT	ATCGCGCCAC AAAAAGAGAA GGGGAAGCTG GGGAAGGCCT CTGGGGAAGG AGGGTTGAGC GAGCAGTGAA TGCAGTGTTT	31600 31700
GGTGATGGGG GGTGGAGTGG CATTGAGCTG CTCATTCTTG ACAGGAGGGA GGTCAGCAAG GAGCAGAGGA	CCTGCGTGAG AAAGAACACA GGGGGATTGC ACTTGGAGGA GCAGAGAGGC ATGTGGTGGA GTGACAGAGT TCCATATCAT	AAAGTGAGAC GAACAGCATA AGTTGAAAGT AGCGGGAACC CCTGCACTGA GGAGAGTGAG GGCTGAATCA CCATTATGTT	CCTGTCAAAA AGAGGGGGTT AGGGAAGTCA GTGCAGATGT GCCTGGCGGG CAGCAGGAGG AAAAAGACCT CCAAAGGACT	ATCGCGCCAC AAAAAGAGAA GGGGAAGCTG GGGAAGGCCT CTGGGGAAGG AGGGTTGAGC GAGCAGTGAA TGCAGTGTTT CTTCAGGATG	31600 31700 31800 31900
GGTGATGGGG GGTGGAGTGG CATTGAGCTG CTCATTCTTG ACAGGAGGGA GGTCAGCAAG GAGCAGAGGA CCGTGTGGAG	CCTGCGTGAG AAAGAACACA GGGGGATTGC ACTTGGAGGA GCAGAGAGGC ATGTGGTGGA GTGACAGAGT TCCATATCAT AAAGGAAGAG	AAAGTGAGAC GAACAGCATA AGTTGAAAGT AGCGGGAACC CCTGCACTGA GGAGAGTGAG GGCTGAATCA CCATTATGTT GGTGGAAGCC	CCTGTCAAAA AGAGGGGTT AGGGAAGTCA GTGCAGATGT GCCTGGCGGG CAGCAGGAGG AAAAAGACCT CCAAAGGACT AGGAGGTCTG	ATCGCGCCAC AAAAAGAGAA GGGGAAGCTG GGGAAGGCCT CTGGGGAAGG AGGGTTGAGC GAGCAGTGAA TGCAGTGTTT CTTCAGGATG GAGGGGAGGTC	31600 31700 31800
GGTGATGGGG GGTGGAGTGG CATTGAGCTG CTCATTCTTG ACAGGAGGGA GGTCAGCAAG GAGCAGAGGA CCGTGTGGAG TGGAGTGGAG	CCTGCGTGAG AAAGAACACA GGGGGATTGC ACTTGGAGGA GCAGAGAGGC ATGTGGTGGA GTGACAGAGT TCCATATCAT AAAGGAAGAG GAGATGAGAG	AAAGTGAGAC GAACAGCATA AGTTGAAAGT AGCGGGAACC CCTGCACTGA GGAGAGTGAG GGCTGAATCA CCATTATGTT GGTGGAAGCC GCTCCGGATC	CCTGTCAAAA AGAGGGGTT AGGGAAGTCA GTGCAGATGT GCCTGGCGGG CAGCAGGAGG AAAAAGACCT CCAAAAGGACT AGGAGGTCTG CCTCTGGGAG	ATCGCGCCAC AAAAAGAGAA GGGGAAGCTG GGGAAGGCCT CTGGGGAAGG AGGGTTGAGC GAGCAGTGAA TGCAGTGTTT CTTCAGGATG GAGGGAGGTC GTAGATTTGA	31600 31700 31800 31900 32000
GGTGATGGGG GGTGGAGTGG CATTGAGCTG CTCATTCTTG ACAGGAGGGA GGTCAGCAAG GAGCAGAGGA CCGTGTGGAG TGGAGTGGAG	CCTGCGTGAG AAAGAACACA GGGGGATTGC ACTTGGAGGA GCAGAGAGGC ATGTGGTGGA GTGACAGAGT TCCATATCAT AAAGGAAGAG GAGATGAGAG GAATTGAGGT	AAAGTGAGAC GAACAGCATA AGTTGAAAGT AGCGGGAACC CCTGCACTGA GGAGAGTGAG GGCTGAATCA CCATTATGTT GGTGGAAGCC GCTCCGGATC GAAAGACAGA	CCTGTCAAAA AGAGGGGTT AGGGAAGTCA GTGCAGATGT GCCTGGCGGG CAGCAGGAGG AAAAAGACCT CCAAAAGGACT AGGAGGTCTG CCTCTGGGAG GAAAGAGAAG	ATCGCGCCAC AAAAAGAGAA GGGGAAGCTG GGGAAGGCCT CTGGGGAAGG AGGGTTGAGC GAGCAGTGAA TGCAGTGTTT CTTCAGGATG GAGGGAGGTC GTAGATTTGA TGGCCAGGAT	31600 31700 31800 31900
GGTGATGGGG GGTGGAGTGG CATTGAGCTG CTCATTCTTG ACAGGAGGGA GGTCAGCAAG GAGCAGAGGA CCGTGTGGAG TGGAGTGGAG	CCTGCGTGAG AAAGAACACA GGGGGATTGC ACTTGGAGGA GCAGAGAGGC ATGTGGTGGA GTGACAGAGT TCCATATCAT AAAGGAAGAG GAGATGAGAG GAGATGAGAG TTTCTGACCT	AAAGTGAGAC GAACAGCATA AGTTGAAAGT AGCGGGAACC CCTGCACTGA GGAGAGTGAG GGCTGAATCA CCATTATGTT GGTGGAAGCC GCTCCGGATC GAAAGACAGA AAACTACTGG	CCTGTCAAAA AGAGGGGGTT AGGGAAGTCA GTGCAGATGT GCCTGGCGGG CAGCAGGAGG AAAAAGACCT CCAAAGGACT AGGAGGTCTG CCTCTGGGAG GAAAGAGAAG GAAGGACGC	ATCGCGCCAC AAAAAGAGAA GGGGAAGCTG GGGAAGGCT CTGGGGAAGG AGGGTTGAGC GAGCAGTGAA TGCAGTGTTT CTTCAGGATG GAGGGAGGTC GTAGATTTGA TGGCCAGGAT GTTGTCATTT	31600 31700 31800 31900 32000 32100
GGTGATGGGG GGTGGAGTGG CATTGAGCTG CTCATTCTTG ACAGGAGGGA GGTCAGCAAG GAGCAGAGGA CCGTGTGGAG TGGAGTGGAG	CCTGCGTGAG AAAGAACACA GGGGGATTGC ACTTGGAGGA GCAGAGAGGC ATGTGGTGGA GTGACAGAGT TCCATATCAT AAAGGAAGAG GAATTGAGGT TTTCTGACCT GAAGGATGCC	AAAGTGAGAC GAACAGCATA AGTTGAAAGT AGCGGGAACC CCTGCACTGA GGAGAGTGAG GGCTGAATCA CCATTATGTT GGTGGAAGCC GCTCCGGATC GAAAGACAGA AAACTACTGG AGAAGAGAAG	CCTGTCAAAA AGAGGGGGTT AGGGAAGTCA GTGCAGATGT GCCTGGCGGG CAGCAGGAGG AAAAAGACCT CCAAAGGACT AGGAGGTCTG CCTCTGGGAG GAAAGAGAAG GAAGAAGAGG GAAGGACGCG GTACTTTGGG	ATCGCGCCAC AAAAAGAGAA GGGGAAGCTG GGGAAGGCT CTGGGGAAGG AGGGTTGAGC GAGCAGTGAA TGCAGTGTTT CTTCAGGATG GAGGGAGGTC GTAGATTTGA TGGCCAGGAT GTTGTCATTT GAGGGGCGGG	31600 31700 31800 31900 32000
GGTGATGGGG GGTGGAGTGG CATTGAGCTG CTCATTCTTG ACAGGAGGGA GGTCAGCAAG GACCAGAGGA CCGTGTGGAG TGGAGTGGAG	CCTGCGTGAG AAAGAACACA GGGGGATTGC ACTTGGAGGA GCAGAGAGGC ATGTGGTGGA GTGACAGAGT TCCATATCAT AAAGGAAGAG GAGATGAGAG GAGATGAGGT TTTCTGACCT GAAGGATGCA	AAAGTGAGAC GAACAGCATA AGTTGAAAGT AGCGGGAACC CCTGCACTGA GGAGAGTGAG GGCTGAATCA CCATTATGTT GGTGGAAGCC GCTCCGGATC GAAAGACAGA AAACTACTGG AGAAGAGAAG	CCTGTCAAAA AGAGGGGGTT AGGGAAGTCA GTGCAGATGT GCCTGGCGGG CAGCAGGAGG AAAAAGACCT CCAAAGGACT AGGAGGTCTG CCTCTGGGAG GAAAGAAGACGCG GAAAGACGCG GTACTTTGGG GCTTGGAATA	ATCGCGCCAC AAAAAGAGAA GGGGAAGCTG GGGAAGGCT CTGGGGAAGG AGGGTTGAGC GAGCAGTGAA TGCAGTGTTT CTTCAGGATG GAGGGAGGTC GTAGATTTGA TGGCCAGGAT GTTGTCATTT GAGGGGCGGG TTTATTTGCT	31600 31700 31800 31900 32000 32100 32200
GGTGATGGGG GGTGGAGTGG CATTGAGCTG CTCATTCTTG ACAGGAGGGA GGTCAGCAAG GAGCAGAGGA CCGTGTGGAG TGGAGTGGAG	CCTGCGTGAG AAAGAACACA GGGGGATTGC ACTTGGAGGA GCAGAGAGGC ATGTGGTGGA GTGACAGAGT TCCATATCAT AAAGGAAGAG GAGATGAGAG GAATTGAGGT TTCTGACCT GAAGGATGCC TAGTTTTGGA GCTCCTTAAC	AAAGTGAGAC GAACAGCATA AGTTGAAAGT AGCGGGAACC CCTGCACTGA GGAGAGTGAG GGCTGAATCA CCATTATGTT GGTGGAAGCC GCTCCGGATC GAAAGACAGA AAACTACTGG AGAAGAGAAG	CCTGTCAAAA AGAGGGGTT AGGGAAGTCA GTGCAGATGT GCCTGGCGGG CAGCAGGAGG AAAAAGACCT CCAAAGGACT AGGAGGTCTG CCTCTGGGAG GAAAGAAGACGCG GAAAGACGCG GTACTTTGGG GCTTGGAATA CTTATGCAAG	ATCGCGCCAC AAAAAGAGAA GGGAAGCTG GGGAAGGCT CTGGGGAAGG AGGGTTGAGC GAGCAGTGAA TGCAGTGTT CTTCAGGATG GAGGGAGGTC GTAGATTTGA TGGCCAGGAT GTTGTCATTT GAGGGGCGGG TTTATTTGCT TTGTTGTCAG	31600 31700 31800 31900 32000 32100
GGTGATGGGG GGTGGAGTGG CATTGAGCTG CTCATTCTTG ACAGGAGGGA GGTCAGCAAG GAGCAGAGGA CCGTGTGGAG TGGAGTGGAG	CCTGCGTGAG AAAGAACACA GGGGGATTGC ACTTGGAGGA GCAGAGAGGC ATGTGGTGGA GTGACAGAGT TCCATATCAT AAAGGAAGAG GAGATGAGAG GAATTGAGGT TTTCTGACCT GAAGGATGCC TAGTTTTGGA GCTCCTTAAC CGTGGCACTG	AAAGTGAGAC GAACAGCATA AGTTGAAAGT AGCGGGAACC CCTGCACTGA GGAGAGTGAG GGCTGAATCA CCATTATGTT GGTGGAAGCC GCTCCGGATC GAAAGACAGA AAACTACTGG AGAAGAGAAG	CCTGTCAAAA AGAGGGGGTT AGGGAAGTCA GTGCAGATGT GCCTGGCGGG CAGCAGGAGG AAAAAGACCT CCAAAGGACT AGGAGGTCTG CCTCTGGGAG GAAAGAAGACGCG GAAAGACGCG GTACTTTGGG GCTTGGAATA	ATCGCGCCAC AAAAAGAGAA GGGGAAGCTG GGGAAGGCT CTGGGGAAGG AGGGTTGAGC GAGCAGTGAA TGCAGTGTTT CTTCAGGATG GAGGGAGGTC GTAGATTTGA TGGCCAGGAT GTTGTCATTT GAGGGGCGGG TTTATTTGCT TTGTTGTCAG CCTGAGTGGT	31600 31700 31800 31900 32000 32100 32200

			2/15		
TCCTGCCATG	GCCACTGACA	AGCTAGGAGG	GCGCTGAAAG	GAGAAGGACC	
CCGATGTCTC			CTCTCCCATT	GGCCAAACCC	32500
AACCGGAAAC	TAAAGGCCAA		TGATGAAGAC	TGTGGTATCA	
	CACAGAGAGG		GTGGAGACAA	AGAGGGGCGC	32600
	CAAATGGGGA		CCCCTAGCTC	GAGGGCAGAG	02000
	ATGGAATGGC		CTGCTACATA	TTTTCCCTTT	32700
AATTTGGCCA		GTCAAGTTTG	TGTGAGATAA	AGGTGCACTT	32700
GGTTCGTTCT	TGTCTAATGG		CATGGGTATT	TCTTCAGCTT	32800
					32000
CCACAGTCAT	CCCGACACTA		TCCAGCAGCC	CTGGTCCTGG	22000
CCCCAGCTCT	GTGGGCGCTG		TTGCCTGCAC	TGTGCTTTTG	32900
	CTTGGTCCTG	TTTGGGTGCA	AGTCCCCCTC	ACGCATTGAG	
T					
TTCCTGGGCC			TCCCCAGGGA	ACATGAAGGT	33000
	T [exon	4: 32988			
CTTGCAGGAG	CCCACCTGCG	TCTCCGACTA	CATGAGCATC	TCTACTTGCG	
AGTGGAAGAT	GAATGGTCCC	ACCAATTGCA	GCACCGAGCT	CCGCCTGTTG	33100
TACCAGCTGG	TTTTTCTGCT	CTCCGAGTAA	GCCTGCGCTG	GAGCTGGAGG	
	331	26]	С		
TTTGGGGAGG	TTGTGCCCAA	AGGGTTTGCC	CCAAGAGTGA	GCTGGGTCCA	33200
GGTGGTGCGC	TGGAGTGCAG	GATGCTGAGT	ATGGTTTGCT	GCTGTTTATA	
TGGTGTTAGA	GGGGAGGTCC	CATCTCCAGG	GACATGTTAT	GTAAGATACA	33300
GTGGAGCGCA	TGGTGGGAGT	GTTGGTCCAC	GTGGCACATG	GATACGGCTG	
GAATACTGGA		AGTTCTCACA	CTTTTTGGTC	TCAGGACCCT	33400
TTTTCACACT	TAAAAATGAG	TGAGGACCCA		GTGTAGGTAA	
CACATCATTC	TATGTTTACC	TAATTAGAAC	TTGCAATGAA	GAAATGGTGT	33500
AATTTTTAAA		AATTAAAAAT	TTTTTTTTTTT	ACTGAAATGG	33300
AGGTCTCACT	GTGTTGCCCA		AAACTCCTGG	GCTCCAGTGA	33600
TCCTCCTGCC	TCCGCCTCCC		GATTACAAGC	GTGAGCCGCT	33000
		AAATTTTAAG	TCCCAACAAC	ATGCAAGCCC	33700
GTATCCGGCC					33700
	AATCTTCAGA	TCAATTACAT	GATCACAGGT	CATGTAGCCT	22000
CTAGAAAATT	CCACTGTACG	CCAGTGAGAG	AGAGTGAAAA	GGCAAATAAC	33800
GTCCCTGTAT	TATGATGAAA		CTGGTGGGCC	CAGACÇACAC	22000
TTTGAGAACC	ACTGGACTAG		GAGGAGTACG	GTGTTGAGAG	33900
TGGAGTCCTC	TGTGATGGTG		GACACATGGC	ATAGGAGTCA	0.4000
GGTGGTTCCC	TGGGCTACTC	CATGGTGCAC	AGGATGCTTC	GTTACACTGG	34000
TGCCCAGGAC		ACACAAGACA	CACAGTTACG	GGGCAGACTG	
	GCACACCAGC			GGTGGTATTC	34100
			TTTGTTTCCA		
			CAAATCCGGC		34200
			CTGGCTGCTG		
AGAAACTGCA	TGGCCCTCCT	TTATGTTTTT	TGTTTGTTTG	TTTGTTTGTT	34300
TGTTTTCTTT	GAGACAGAGT	TTCGCTCTTG	TTGCCCAGGC	TGGAGTGCAG	
TGGCACAATC	TCGGCTCACT	GCAACCTCTG	CCTCCCGGGT	TCAAGCGATT	34400
CTCCTGTCTC	AGCCTCCCGA	GTAGTTGGGA	TTAATGGTGC	CTGCCACCAC	
ACCCGGCTAA	TTTTTCGTAT	TTTTAGTAGA	GACCGGTTTT	CATCATGTTG	34500
GCCAAGCTGG	TCTCGAACTC	CTGAACTCAG	GTGATCCACC	CGCCTCAGCG	
TCCCAAAGTG	CTGGGATTAC	AGGCATGAGC	CACTGAGCCC	GGCCTCCTCC	34600
			AAAGTCAAAT		
			TACACATGGG		34700
			TGGGAGGGTG		
			TGTACACCAT		34800
			GGCAGCATAT		
			TTGTAAGGCC		34900
			GGAGGCCGAG		
212301000		3.100001110	20110000110		

FIGURE 1B

			3/15		05000
	CAGGAGTTCG		GGCCAACATG		35000
	AAAATACAAC	AATTAACTGG	GTGTAGTGGC	GCACACCTGT	
AATCCCAGCT	ACTAGGGAGG	CTGAGGCGGG	AGAATTGCTT	GAGCCCAGGA	35100
GGTGGAGGTT	GCAGTGAGCC	GAGATCACAT	CACTGTACTC	TAGCCTGGGT	
GACAGTGAGA	CTTTGTCTCA	GGAAAAAAAA	ACAAAAACAA	AAAACAAAAA	35200
ACTCGTACCC	CCTAAATTTA	TACAAATAAC	CAAAAAAAAA	AAAAAAAAAG	
GAAATTGTGT	GGCCTTTGAA	GTCCAAAATA	TTAACTATCT	GGCCTGTTAC	35300
AGAAAAAGTT	TGCAGACCCC	TGGCCTAGCC	CGTGAGATGT	GGGTTGGCTG	
TTAAGGTGGA	ACATTGGAAT	TATCTTACGA	TGGCCAAACT	GTGCGATGCA	35400
GAGCTTATGT	TGTTCTAAAT	TAATTAGTGC	CACCGGTTCT	TCCCTTTCAT	
GGGCTTTCAG	GAACAAGCTA	AGTCCCAGGA	CCAGGGCCGG	CAGCTAGGCA	35500
GGTGTGAGGA	GCATCCTTGG	TGCATGTGGT	AAGAGGCTGT	GGCCAGCAAG	
	CTAGTCGGCT	GCCCCAGCAC	ACCCTGGCCG	CTCCCAAGCC	35600
	TCCTCACATC	CGTGATCGGG	AAGCTGGAAG	AGTCTGATGC	
	GGCATGTCCC		GTGGGGCCCA		35700
	CCTAACCCAG		TGCAGAGCCC	ACACGTGTAT	00,00
AGGTONCCHG	CCIFRICCONO	CCCCIGIGIO	100/10/1000	G	
lovon	5: 35736			G	
•	AACGGAGGCG	CCCCCTCCCT	CTCCCA CCTC	CTCATCCATC	35800
CCCIGAGAAC		CGGGGIGCGI	GIGCCACCIG	CICAIGGAIG	33000
A CCMCCMCA C		TATACACTGG	7 CCTCTCCCC	TGGGCAGCAG	
ACGTGGTCAG		TATACACTGG	ACCIGIGGGC	IGGGCAGCAG	
CTCCTCTCCT	С		CA CCA ECCEC	7 CC7 CCCCCC	35900
CTGCTGTGGA	AGGGCTCCTT		GAGCATGGTG	AGCAGGGGG	33900
	358	=		accent acce	
	GGGTGGCTGG	GTGTGTTCCC	ACAGCTGCCT	GGGCTGAGGG	
${f T}$				T	0.000
	AGGGGAGGAG	GTGGGGTCAT	AGCAACAGCA	GGAGGAAGCC	36000
А					
GCCTGTATTT	TCCCAAATCT	GATGGGATTC	CTGCCCCTGC	CTGGGCCTCA	
GTCCTCCCAC	CTTTGAAACG	GAGCTGGTCG	CAGTAGACCA	CCAAGCCCCC	36100
TTCAGCCCAG		CCCTGAACTT	AAGTGCCCAG	GAAGGCGTAT	
TGAGATGAGG	TGTGCTTGCT	GGAAGGCATG	CCTGCTGCTG	ATTGAAAACC	36200
GAACTGGGAA	CATTCCTTCC	ATTCTGTGTC	CACTGGTCAG	CTGCTGCGGC	
TTTGGATGGT	CTTGACCGTG	GAAGGCTGAC	CTTCTTCTGG	TACCCGGAGT	36300
CCCTGCAGGA	ATCCCCCTTG	AGCTTGCTGG	GCTGTGGTGA	CAGGAGTTTA	
 AAACATGCGT	TGTATTCCAG	TGATGCATGA	TATGACATGC	ATCACAGGAA	36400
		GATATGATTG	CTTCAAAGGA		
TAAAACAGAT	GAATCAAAAT	AAAGAAAAAT	ACTCAGTAAA	TCATCATAAA	36500
GTACAGAGAT	GTGGCCAAAG	GTGTGAAGGA	TGCAGCTGTA	AAAGCTGAAG	•
TTTGAGGCCG	GGTGTGGTGG	TTCATGCCTA	TAATCCCAGC	ACTTTGGGAG	36600
GCCGAGCCCA	GCGGATCACC	GGAGGTCAGG	AGTTCGAGAC	CAGCCTGGAC	
AACATGGTAA	AACCCCGTCT	CTACTAAAAA	TACAAAAAAT	TAGTCTGGCA	36700
TGGTGGCAGG	CGCCTGTAAT	CCCAGCTACT	TGGGAGGCTG	AGGTAGGAGA	
ATGGCTTGAA	CCCAGGAGAA	GGAGGTTGCA	GTGAGCTTAG	ATCATGCTAC	36800
TGCCCTCCAG	CCTGGGCGAC	AGAGTGAGAT	TACGTCTCAA	AAAAATAAAA	
	ATAAAAAGAT				36900
	CTTTGCCTTC				
	CATGCCTGGA				37000
	AGCCCTGGGC				
	CAGCCTGGGC				37100
	GTAATTAATA				
	TATTATAATC				37200
	TATGCTATGG				3.233
	GTAGGCCGGG.				37300
COTGIGITI	O1F1GGCCGGG.			110 1 01 10 1 0 0 M	3,330

FIGURE 1C

TAGATCCTCA	CAMACACCCC	CCTTCTCCCC	4/15 CAGTGAAACC	CAGGGCCCCA	
		A	CAGIGIULICO	-	
	6: 37334				27400
GGAAACCTGA			GACACTCTGC	TGCTGACCTG	37400
GAGCAACCCG			GTATAATCAT	CTCACCTATG	0.7.5.0.0
CAGTCAACAT	TTGGAGTGAA	AACGACCCGG	CAGATGTGAG	TGGGCATGCT	37500
	374	T 851			
TTGACGTTTT			GGGTGGGTGA	CCAGCAGAGG	
		CCCTCCCACC		CCCTCCATAC	37600
CCCAGTCCCT	GGAGCCAGGA	GCCTGGGAGG	CAAGCCCTGG T	A	37000
CAAATCCCAG	GAGCTAGAGA	CCTGGCTTCT	CACCTGGCTC	TGCCCTAGGC	
T	0110 0 111			A	
AAGTCCCTTT	GCTTCCTGGC	CCCCCACCCC	TCACATCAGA	GAAGGGGAGT	37700
		T			
TATCTCTGCA			GGTAGGGCTG	TGGGCCACAT	27000
CTGTGTTTCC			ATCGTAGGTG	GCACATTGAC	37800
AGCTCACTTG		TTATTGAAGA	GAATAATACT	GACTCAAGAG	27000
ACAGTGACCC		CCTTTTGAGG	CCAACGGGTT	AAGGAGGAAG	37900
TCCCCATACA		TTACTAATTC		AGAGAGCAGA	20000
GGCCACACCC		CTTTCCCAAG	AAAACAAGAT	CAGTTTGTTG	38000
GTTGTTCCCC		GTCCTGACAT	TCCCTTCACA		20100
	GTTGTTGTTT	GTTTTGAGAC	AGAGTCTCAC	TCTGTCACCC	38100
AGGGTGGAAC		GATCTTGGCT	CACTGCAACC	TCCGCCTCCT	20200
	GATTCTCCTG	CCTCAGCCTC		GGGACTACAG	38200
	CCGTGCCCAG	CTAATTTTTG		AGAGATGGGG	38300
TTTCACTGCG	TTGGCCAGGC	TGGTCTCAAA	CTCCTGACCT	CAGATGATCC	36300
ACTCGCCTTG	GCCTCCCAAA	GTGCTGGGAT			38400
CCTGGCCAGT	GGAGTTCCTT	CTTAAGTACA	TGTATTGACA		30400
GGGCGAGAGG		AACTATCAGG	TCAGTAATGG		38500
CCACAGTGGG	TGGCTGAGTC	CCCCTATTTT	TCTGCTGGTG		30300
 	CCACCCATGT	TTCCCCACCC	TGAATCCACC	GTCCCACAG	38600
	GGGACAATCT	CTGGACATAT			30000
	AATGCCTGCT	GTGCCACTCG	CCAGCTGTGT	=	38700
	ACCTCTTTGT	GCCTCAGTTT	CCTCATCTGT CAGTACAAGG		30700
TGACAAGAGC	ACCCGCCCAC	AGGGCTATGA			38800
AGATGAGCTC	CCCTGTTTGG	CCCACATGTG	CCCAMCTCC	CATGTGCCCT	30000
TTCTCTTGAG	TGCCCCAGGC	CACAGAGATC	TTTCTCTCTCCC	CGCTGTCCCA CGGCTCTGTG	38900
CACACTGGTC	TGTCATTTGT	CCCCTGAGGI	CCTCTCACCC	AGCAGGCACC	30300
				CTCTCAATCT	39000
		CTGGTGTCTG		TTTCCCCTTT	55000
GGCCAAGCCA	GGGGTGTCGA	TTTATATCTC		GTTGGCTCAC	39100
GGCACTGGGC	CAGGTAIGGG	CCCCCCCATC	CCCCGAAGCA	GTGCACAGAT	0520
ACAGCAGAGG	CCCCCAAAGC	THE THE CONTROL OF TH		CTTCTCATGC	39200
GCTAGAGAGT	GGGGCAAGII	ACACACACTC	CCAAGGATGG	GCTGGGGGGA	03200
		CACTCCAAAC	ATATCTTATT	TAATATTTC	39300
AGAGAAAGG1	ACCACCITCA	ACCCATCCCT	GGATCCAGCT	TCTAGGAACC	
ATAITICIAG	MCCCCCCCCCC	. МОССАТССТ ПРОПОМЕНТИТЕ		TTTTTAGGCA	39400
CCCTCTTCCCC	1 G C G C C C T G C	. TITATICIGI : CCACATATCO	CTACTAGTTC	CTCCAGGCCT	
A CAMCCCA A A	CCCACACACTCC	CABABACCCTT	· 中中中中中中中中中中	G ACGGTTCTAA	39500
MCAICCCAAA	A A CCCACAGIGG	: CTCAGTGGCT	тессттесьт	GCTGTGCCAG	
	AAGGCIGCIG		GAGAGGGTGC	TGGTGGAGGG	39600
CCICIGAACC			RF 1D		

FIGURE 1D

				5/15		
	CCCTGCTTGT	CCAGGGAGGA	GTCACATACC	TGCCTCTAGG	GCTGCAGGTG	
	GGCTCAGCTC	CATCCAAACC	AGATGAACTG	AAAATAAGGC	AGGAGTGGCT	39700
	TCCCCAGGGG	AAACTGGGGA	AGAGGAAGCA	GGACTGTGCT	GGCTAAAATG	
	CCAGCCAGGT	TTAAGACGTG	GCACCAGATG	CCAGTCATGG	GATTGGATTG	39800
	GTCAGCATGC	CTGGGCTATG	GCTTAGGGGT	ATGTTGGTGC	TCAGGGATGC	
	CACAGGCCTC	CAGATACCAG	GTCTGAGGCA	GAAGAATGAA	GTCCAGCTTC	39900
	TCTTGTGGGT	GGAACAGTGG	CAACTGAGAT	ACCCCATCTC	TCCCTTCCCA	
	AGAACAGAGC	TGAACATAAA	GAATTTAGTG	ATTGGCCAGA	GCTTGGCCAC	40000
	ATGCTCCCCT	CTGATGAATG	ATAGGCCAGG	TGATGGGATT	GGCACAATTG	
	GCTTAGACTA	ATGAGGGTTG	GCCCTGGAGT	TGCAGGCAGT	GGAGTTCTGT	40100
	CCTAAGCAGT	GGGCACCTAA	ACCCGATGGC	ATAAAAGCTG	GGCGGGTGTC	
	CACCTGCATC	TGCCACAGCA	CTATAGGCAC	CAACTGTGGC	TCATACTGAG	40200
	TGGGATAAAT		AACATTAGGA	ACTTACTATA	GAATTTTGGG	
	GCTAGAGCTA	CTCATTCATT		ATTTCTAGGC	AAGGTTCCAT	40300
"	AGTGGAGGG	GAGTTTTGGC	TTGGGCATTG		AGGAGTTTTC	
	TAGATGGGGA	AAGAAGGGAA	CGGTAGACCA	GGCAGAGGGA	ACTGCATGAT	40400
	AAAAGGTTTA	TGGGTGTGAA	AATTCATGGA	ATGTTTGAGG	ATTATGGGGT	
	TGGGGGATGT	GGGAATATGT		AGCACCAAAC	AAAGCCAAAA	40500
	GTTTAGTTAG	AGCCCTGAAT	GCCTGCCTCA	TAATGGTTTC	CATATTTTAT	
	ATGCCTACTA	TGTGCCAGGC	ACATTGCTCA	GGGTCACACA	GCTGGAAATG	40600
1.	GCAGGGCTGA	GTTTTTGTTG	TTGTTGTTGT	TGTTGAGACA	GAGTCTCACT	
	CTATCACCCA		CAGGGGCGTG	ATCATGGCTC	ACTGCATCCT	40700
	TGACTTCCTG	GGATCAGGTG	ATTCTCCCAC	CTCTGCCTCC	CAGGTAGCTG	
	GGACTACAGG	CACAGGCCAC	CACGCCAGGC	TAATTTTTTG	TATTTTTAGT	40800
	AGCGACAGGG	TCTCGCCATG	TTGTCCGGGC	TGGTCTGGAT	CTCCTGGCTT	
	CAAGTGATCC	CCCTGGCTCA	GCCTCCCAAG	GTGCTGGGAT	TACAGGCTTG	40900
	AGCCACCGCA	TCCAGCCCAG	ATCTGAGATT	TGCACCCAGT	ATTTGAACTC	
	CCAAGCCTGT	GCTCTTTTTC	CTCCCATGGA	CATTTCTCTC	AGAGATGGTC	41000
	TCCCAAACAC	CTGTCCTTCT	TGTTAAAAAA	CAGACAAACC	GCAAGTAGTT	
	CTTTGGAAGC	TCAGATTTCT	CTTTTGTTTC	TTAGTAAAAC	ATTTCCCAGT	41100
	TCCCAGCTCC	CTTCCAGGGT	GTAAGATTTC	TTCGGTAACT	TACATCTAGC	
	TGTTGCTTCT	TGTTTGCTCA	TGTTTAGAAA	GAAAGACAAA	AGAGAGTGAG	41200
	AATTTTCTCT	CCCTTCCCCA		AACTCACACC	CCACCCTCAG	
	CTCCCTCTGT	AATAGGAAAA	TCTCTGAACT	CTCTGTAGTT	GCTCCAGCAA	41300
	TCTTTTGGAA	CTTTGCTTCT	TTCTTGTGAA		CTTGGCTCAC	
Y.				AACCACAAGC		41400
	CTCCCACTAA	CCACCAACAA	ACTECCEGE	GCTGAGGAAG	AGGAGAGGGA	
	CIGCCAGIAA	CCAGGAAGAA	CCACCCACAC	GGGTGACAGG	ATGAGAACTC	41500
	A COMMCOMO	CUIGGAICIC	CCCTCACTCA	TGAATATAGC	GTTCATGTAT	
	AGGIIGCICA	ACCEPTTTTC	CACCCTAAAA	GTAATAGTTA	CACAAAATAA	41600
				GGAAACATGT		
				CTGACCACTG		41700
				GGGCAGGCAG		12.00
	CTTGCCAGAA		TCTCTATACA	AGCAAATGTG	TGTGTTCAGT	41800
	CATCCTTTAG	AGAGAGCIIA	A TOTAL ACA	AATAATGGTA	CTACCAGCTT	12000
				TCATAGTTTC		41900
	CACAGCITIA	TACCATCACCC	ACCTTCTCTC	CTTTAGAGTC	TCGTGAGGCT	12000
	AGICIGGACA	TAGCTTAGCC	CCCTCCACTT	TCATCTGAGG	CTCAATTGGG	42000
	ATAATCAAGG	TGIGGGAIGG	TT ACACAGTT	CCTCACATTC	AGTCCCTGGC	12000
	TAAGGTCAC	A CTCA CA CCC	TINCANIALI	CCTCCCTCTT	GGTTGTAGTT	42100
	AGGCTGTTGA	TO COUNT COOK		CAAACCCATC	AAGGCAGAGA	12100
	AACCCTGAAT	TCCTTCCCAT	#7##7C7C#11G	$\nabla \Delta \Delta \Delta \Delta C C \Delta C$	TAATCACATC	42200
	GAUTTGCCTA	GCAAGTAGGA	CCATCACCO		TGTGGGTTAG	12200
	CATGAAATCC	CACCECCEC	CCALCACCII	CAACACCACA	TGACACAAAG	42300
	AAACAAGTAG	CAGGTCCTGC		DE 1E	DARADADINDI	12300
			TIOI			

FIGURE 1E

			- /		
			6/15		
		CATCGGGGCC		TGTCTGCAGT	40400
	CCATCTCTCT		TTTTTTTTTT	TTTTTCCGAG	42400
		CCCAGGCTGG		CATGATCTCA	10500
		CCCAGGTTCA	AATGATTCTT	CTGCCTCAGC	42500
	GCTGGGATTA		CCACCACACC	CAGCTAATTT	
TTGTATTTTT	AGTAGAGACA	GAGTTTCACC	ATGTTGGCCA	GGCTGGTCTT	42600
GAACTCCTCA	CCTCAAGTGA	TCCACCCACT	TCGGCCTCCC	AAAGTGCTGG	
	ATGAGCCACC		CCATCTCTCT	TTAAAAAAACA	42700
AACAAACAAA	CAAAAAACAT	AAAAAGAAGC	AGAGAACACA	TACACATCTG	
CATCTTCCCT	TGTTTACTTA	ACAATAGATC	TTGGAAGTCA	CTTCTCAGTA	42800
GAGGCTAGGT	TGGGCAGAGC	ATTGGATTCT	AGGCCAGTGA	GTTTGGACTT	
GACCATGGAG	ACACTAGGAA	GCCCATGAAG	GACAGAGAGA	GATGCCTCGA	42900
	CCTTTAGAAA		TGCTTTTTGT	ATACCAAACC	
			TTTCCTTATC	ACCACAACCC	43000
TGCGGGAAGG	GAGATAGGCA	CTTTTATTAT	CTTCATTTTG	CAGATGAGGA	
	CAGAGAGGTT		CTTAAGGTCA	CACAGCCAGG	43100
AAGTGGTAGT		ACCCTTGTTT	TACAGATGAG	ATTGAATTAT	
CTCACGAAAA		TTAAACAACT	TGCCTAAGTA	ACATACAGCT	43200
	GGAGCCTGAC	GCATGTTGCT	CTAGCCTGGT	CACAGTTACA	
	GCAATGGCCT	GAACAGGACG	AACAACCAAA	TACCCAGGCT	43300
	AAACATGGTG	GGGTCAGCTA	ACGACAGCAA	CCAGGGTGGG	
	CCTCGCCCCC	GGCTGGTGCC	CTAACATCTC	CCTTTTCTCT	43400
		GTGACCTACC	TAGAACCCTC	CCTCCGCATC	
ACCAGIICAG	AMICIAIAAC	010/1001/100	111011100010	A	
[arran	7: 43406				
	CCCTGAAGTC	TGGGATTTCC	TACAGGGCAC	GGGTGAGGGC	43500
			TGAGTGGAGC		
CTGGGCTCAG	CECECACEAE	CCACCTGGAG	AAGCAATGGT	AATCTCCACT	43600
AGTGGCACAA	435		MAGCIMIOGI	711101001101	• • • • • • • • • • • • • • • • • • • •
		CAGACACTTC	СССТСССТСА	GTCTCTGGGC	
CTCCATTCTT	TAGGATGCCT			AGATACACCT	43700
			AGGCTGCAGT		
	ATCTGCCAGG	IAGGCAGGCI	AGGCIGCAGI	74102101111	
C	CCA III CCCIII II A	አ ር አ ር ሞ አ ሞ አ <i>ር ር</i>	AATATATTTC	TTGCTCATGT	43800
CCCACAATTT			AGGTGGTTTC		10000
	CGTGAATGTT				43900
GAAATCTGGG	GAGTGAGGTT				10000
GGACAAAGAT	TCTTACCTAC	TTTTGTGTCC	TGGTTTCCTT	TGGCAGCCIG	44000
GTGAAGCCTA	TGGACCTCAT	TTCAGAATAI		ATAAAATCCC	11000
AGCCTGGGCA	ATATAGTGAA	ACCCCCAICI	CCCAACCCTC	TAGCCAGGCA	44100
TGGTGGCATG	CACCTGTAGT	CCCAGGIACI	CTCA CCCCTC	AGGTGGGAGG	41100
ATCACTTGAG	CCCAGGAGTT	TGAGGCTGCA	GIGAGCCGIG	ATCGTACCAC	44200
TTTACTCCCA	CCTGGGTGAC	AGAGCAAGAG	A CENT CA CA CA	AAAATAAATA	44200
AATACAATGA	AATAAAATAA	AATAAATAGA	ACTACAGAGG	AAACTAATTG	44300
TATTGAAATG	CAGTTATAAA	ACATTTAAAC	ACATITITAA	TCTAGAGATA	44000
TATGTGCTTC	TTTATTAAGA	TCTATAAATA	. ATAAGTTCTA	GGGGTAGCTC	44400
GCATAAATAC	TGTAATTTCA	AAGTAGATAA	GCATAAATAA	TACTTTATGA	44400
TACTGAAATT	GTGATGTGAT	' A'I'GAGAA'I'AG	CTGTGAGTTT	TGTTTTGCTG	44500
GGGACAGGAT	CACTGATGCT	GTCATTACTG	GGGTCTCTTC	CCTCCATTCT	44500
TTTTTTAAAA	TTGTATTTA	TTTTATTTT	AAAATTTTAA	AATAAATAGA	44600
GACAGGGTAT	CACTATGTTC	CCCAGGCTGC	TTTTGACCTC	CTGGGCTCCA	44600
GTGATCTTCC	CATCTTGGCT	TCCCAAAGTO	CTGGGATTAC	AAGTGGGAGC	4 4 7 0 0
CAGTGTTCCT	GGCCCCTTCC	TCCATTCTTA	ATGGAAGGAG	ATGCTAGGTG	44700
TGAGAGGTTA	GGGAAAGTAA	A AGATGTAATT	TCTTTCCCAT	CCAAGTTCTC	4.4000
AGACCCCTGA	ATTCTACCT	G CAGCCATGTI	GGTCCATCAA	CCCCAAGTGA	44800
				and the second s	

FIGURE 1F

			7/15		
AGAATCCCTG CT	CTAGGGCC	CCACCATTGT	CTGTATCCAG	CCAGCAGAAG	
		CATCTGCTTC	TTGAAAGCAG	ACAGCCCGGA	44900
110000		CTCAAATTCT	ATTGGTGAAA	ATGGTCACAT	
		GAGGCTGGGA	ACTTTCTCAC	TTGGAACCTA	45000
	CAACTCTTT		ATCCCACAGG	TCTTTCGCAG	
	TTATCTCA			ATGGACCTAC	45100
IIIOIIIIIII		AGTGATATCT	CTTCCCTTCT	GCTGTCTTCC	
	CTTCACATG	GTGGCATTGT	ATCCTTAGAC	TTGCCACCCA	45200
01101000-	GGCCGTTG	CACACTGTCT	TACATAAAGC	AGGAAGGAAA	
		GTGTACCTTG	TGCATCTCTT	TTTTAATCAG	45300
00.1110		AGCTTCCCTA	GCAAAATTCC	CCTTACATCT	
	ACTGTTACA	TGTTACATGG	TTACTGTTAT	TACTTGCTCA	45400
011111000	ACTGGGAAC	TCAAATGCCT	GGAAAAAGGA	ACAGGATAAT	
1100111001	CAAGCCTTA	GGGTGGGCAT	GGCTCCCTGA	CAAGGGAGAG	45500
00101111000		AGAAGACTGC	TTCAGTTTCC	CCATCTGTAT	
		TCGTGAAAAC	TCAATGAAAG	AAGATTCTTC	45600
21111000111	TAAGGGCTG		ACCCTGACCC	TGCCACCGCA	1000
11100100111	GCAGTGGC	AGCTGGCAGT	GTGGATATCA	GTTGAGCCAC	45700
01100001010	GCATTGCTC	ATCCTGCACT	AGGCAGGGTC	TCCATGGCTG	45700
	CCTGGGCTG	TGAGCTCCAT		TTTTGAATTG	45800
	CCCAGCACA	GAACCAGGTG	CTTGGGAAAG	TATGAAACAG	45000
11110101111	CCATTGGCA	TGGGGAAGGG	AACTAGCTTG	ATTTGCTGAG	45900
1111110111110	rgggaccct	CATTCATTAT	TTCAGCAAAT	TCGGCGATGA	40000
11001001110	IGGCTAGCC	CTGTGCTAGA	CACTGGGGAA		46000
	AGAAATCCC	CACTCTTGTG	GAGCTGACAT	TCTGGAGGGA	40000
	CAAACATAT	AAAGAAAGAA		TGGATCTGGA	46100
	GCTGGGAAG	AAAATAAAAG	CAGAGGAAGG	GGATGGAGCG	40100
	GCAACGGTA	GGGAGGGTGT	CGGGGAAAAC	TTTTTGGAGA	46200
	AAAGTGAAC	AAGGAGAAGT	CAACCGTGTT	GAGATGATGG	40200
0110011111	GTGGACAGG	CCACTCTGTT	CTGAGTGCAT	TATCTATTGA	46300
110211011101	ATCCTCGCA	ACAGCCCTGC	ACGATCAATT	CTGTCATTAA	46300
CCCCATAGTA CA	AGATGAGGA	TGCGGAGGCA	CAGAGAAGAT	AAGGGACTTG	46400
10010101	ACAGCAAGG	AGCCATCCGG	CTCCTAAGTT	GGTGCATTTG	46400
110110111	TCCGGAAAG	AAAGAGCAGC	AAGTTTAAGA	TCTGGAGGTG	46500
GCACTGAGCT T	TGGAGGAGC	AGGGGGCAAT	GAGGTGGCCG	GTGTGACGAG	46500
GACTCAATGT G	CAAGAGGGA		GAGATGAGGT	GGAGGGGTGG	16600
1000000	ATCGTGGAG	GGTCTCGGAC	GAGGGTCCTG	ACCCTGGGTC	46600
TCCAGTCCTG G	GAAGTGGAG	CCCAGGCTGT	ACCATGGCTG		4.67.00
ATGGCTTCCC C			GGAGCCCTTC	GAGCAGCACC	46700
[exon 8	3: 46674				
TCCTGCTGGG C	GTCAGCGTT	TCCTGCATTG	TCATCCTGGC	CGTCTGCCTG	4.6000
TTGTGCTATG T			CTGGGCCCAG	TGCTGCCGAG	46800
	467				
CAGTCCCTCT G	GAGTGCAGG	GTGGCAGGGA	CTTGCCCCTC	TAGTCTGCCC	4.6000
CTTTGCAGTC C	TCTCAGTCA	ATAATACGTA	TTTACTGAGC	AGCTACTACA	46900
CACCTTGAGA G	TAGAGCTGA	GAACATATCG	ACAAGGACCC	CACTTTTTC	45000
TTTTTTTCTT T	TTTTTTTTT	TTTTGAGACG	GAGTCTCACT	CTGTCACCCA	47000
GGCTGGAGTA T	AGTGGCACA	ATCTTGCCTA	ACAGTAACCT	CCGCCTCCCG	45100
GGTTCAAGCA A	TTCTTCTGC	CTCAGCCTCC	AGAGTAGCTG	GGATTACAGG	47100
CGCATGCCAC T	ATGCCCGGC	TAATTTTTTG	TATTTTTGGT	AGAGATGGGG	45000
TTTCACCATG T	TGGTCAGGC	TGGTCTCGAA	CTCCTGACCI	' CATGATCTGC	47200
CTGCCTCAGC C	TCCCAAAGT	GCTGGGATTA	CAGGTGTGAG	CCACTGCACC	45000
CAACCAGGAC T	CCACATTTC	TAAAACCGGC	: ATCCTACTGG	GGAGACTGAA	47300
AATACATATC A	ATCACAAAC	AGGTGGTTTT	CCATAGTGAC	: CCACTCTCTG	
AATGCACTAG A	CCAGGGTGG	AGGCCAGAGA	TCTTCTGGGG	GIGCTTTTTGC	47400
			mm 1C		

FIGURE 1G

			8/15		
AAGGGGGACC	AGGATAAGGC	TCTCCAAGGA	GGGAAAATTT	GAGGGGGCC	
CTGACTGGGG	AGAATGAGCT	GGCCAGGGAT	AAGCAAGATG	GAGTCATCCC	47500
ACATCCCCTT	ACAACACTGG	GTGCCTGGGC	AACTGGGGGC	ATTTGGGGGC	
ATGTGGTAGG	AGCCAGAGGA	ATTTGCGACG	ATTGCCCTGA	TGGAGTCAGG	47600
AGACCTGGGT	TTGAATCCTG	GCCTTGGAGC	TTGGTAGCTG	GCGGCCGACA	
AGTTGCTGAA	ACCCCTGAGC	CTGGGGTTCC	TGCTTTGCAG	AGTGACAGTG	47700
ATGGTGAGAA	CATATTTCAT	CAGCCAGAAG	AGGCCAAATC	ACAGTAAAGG	
CTGAGGGAGG	AGATGAGTGG	CGAGTGGCTG	GGAGGTGGTG	GAAGGAGCCT	47800
CGTTTCCAGA	GAGCTCTTGC	CAGCCCTTGG	AATCATGGTG	TCTCAGAGCC	
TCAGTCCTCC	CATCTCTGAA	ATGGGACTAG	CAAGCTCAAC	CTCACTAAGT	47900
CAGGATTAGA	GGTGGCTAAG	GATTATTAAC	ATGATTGATG	AAAGTGCCCA	
CTCTTGGCCC	AGCACACACT	AGGTAGGCAG	GGAATGCAAA	TTCCCCTCCA	48000
TATCTTGTCA	CTGATGCCTC	CGAGCAACCT	TGGACTGATC	GCCTTGCTCT	
GAGCCTCAGT	TTCCCCATCA	CCTGTACCTC	TTCCCACTCC	CCATCACTAT	48100
ATCCCAGCAT	GCCAGCCTCT	TTGCTGTTCT	TTGTCTTTGG	TTTCTTGTTT	
TGTTCTGTTT	TTTAGACAGG	GTCTCACTCT	GTTAGCCAGG	CTGAAGTGCA	48200
GTGGCGCGGT	TACGGCTCAC	TGCAGCCTCC	AATTCCTGGG	CTAAAGAGAT	
CCTCCCATTT	CAACTTCCAG	AGCAGCTGGG	ACAACAGGCG	CTTGCCACCA	48300
CACCTGGCTA	ATTTTCTTAT	TTTAATTTAA	TTTTATTTTA	TTTTTTGGGA	
CAGAGTGGAG	TCTCAAAAAC	CAAGCTAGAG	TGCAGTGGTG	CGATCTCGAC	48400
TCACTGCAAT	CTCTGCCTCC	CGGGTTCAAG	CGATTCTCCT	GCCTTAGCCT	
2 0220	TGGGATTACA	GGCGTGTGCC	ACGACACCCA	GCTAATTTTT	48500
CCCGACTAGC		GTTTCACCAT	GTTGGCCAGG	ATGGTCTTGA	
GTATTTTTAG	TAGAGATGGG	CACCCACCTC	GTTCTCCCAA	GGTGCTGGGT	48600
ACTCCTGACC	TCAAGTGATC	CTGGCCAATT	TTCTTACATT	TTGTAGAGAC	10000
ACAGGCATGA	GCCACTGTGC		TTGAÁCTTCT	ACCCCTTTAT	48700
TGGCTGTCAC	TTATGTAGCC	CAGGCTGATC ACCATGAATG	AATGACCTCA	TATAAGCATT	10,00
CTTTATTCAT	GGCACTTATT	TTCTTTGAGA	TGGAGTCTCA	TGTTGTCCCC	48800
TCTTTCGTTT	TTTTTTTTT	CGATCTCAGC	TCACTGCAAC	CTCCGCCTTC	1000
CAGGCTGGAG	TGCAGTGGCG	GCCTCAGCCT	CCTGAGTAGC	TGGGATTGCA	48900
CGGGTTCAAG	CGATTCTCCT	GCTAAGTTTT	GCATTTTTAG	TAGAGACGGT	10300
GGCGCCTGCC	ACCATGCCTG		ACTTCTGACC	TCAGGTGATA	49000
GTTTCACCAT	ATTGGCCAGG	CTGGTCTCGA	TTACAGGCGT	GAGCCGCCAT	15000
CACCTGCCTT	GGCCTCCCAA		ATTTATCATC	CATCTTTCCC	49100
GCCTGGCCTC	ATATAAGCAT	TTCTGTCTCC	TCTTTGTCTC	GTTCACTGTT	15100
TCTTGAAGGT		AAGGCAGGCA AGTGAGTCAA		TGCTCAATAA	49200
GTAGCCTCAG		ACCATGGGCA		CAGAAGCGGT	13200
ATATGTGTTT	TACCTCCCAG				49300
CTGAGGACCT	TACCTCCCAG	TGATGATGCA	CTCCCCCACC	TTCCCAGGCC	19000
GGAAGAGAGA	AGGGTTGTGT	CAMMERCCCCM	CACCTCCTCT	GAAAAAGGGA	49400
ATCCCAGGCC	GAACCTAGAA	TALLIGUECT	CCACTTTCAC	TCTTTCCTAA	13100
TTGTTGAGGG	GAACCTAGAA TCTCATTCCC	A CELCT CT CT	TACCTCCCCT	CCTCAGGAAC	49500
TCCCCTGGGG	TUTUATTUU	ACTGAGGACA	CAACCTCCCT	CTGCCACCTA	13000
TCTGTGCTGG	GTAACAGAAT	GCGGGAGIGI	CTCTCCTCAT	CTGTAGAATA	49600
CCAGCTGTCA	TAGAATCCAT	CTCACCACCT		ACTCACTCCT	13000
GGGTTAGCAA	TAGAATCCAT	A CCCECA TCT	CTCATCCCAA	ATAAGTATTG	49700
TTGACCTCCA	GAAACTAATC	AGCCTGATCT	UIGAIGCCAA	מאדעניבונט באנגע אוא א	15100
GTGATAACGA	CCACTTTTAT	GGGAGGAGCG		AATAATTCAG	49800
			GALLAAGAAA	GAATGGTGGG	1000
lexo	n 9: 49781.				
ATCAGATTCC	CAACCCAGCC	CGCAGCCGCC	. ICGIGGCTAT	AATAATCCAG	49900
GATGCTCAGG			JUDITA A	ACTGTGTACA	4000
	498		፣ ሮመጥአአሮሮአሮር	· ₩₩₽₽₽₽₩₽	
TGAAGAAGTG	G TGGTTCAGAA	CACCTGGGCI	JUADDAALLD TUANDAALLD	TTCACTGGCT	50000
TCTGGAATGG	: CAAATAGACA	JUDAUDAOTU /	TIGCAGGGGA	GACAGAGGCA	50000

FIGURE 1H

			0 /1 5		
			9/15	adammedece.	
GAAGCCGAAT	GAGGTCATTA			CCCTTCCCCT	E0100
TGGCAATCCC	AGCCTGGGGT	GGGCTTCTCT	GGGGTTGGTT	TCCTGTTTTT	50100
TTCCCTCCCC	TTGGGAGAAT	GACCCTTGGG	TCATCATCAC	TGTGTCATTC	E0000
CCTGGGGAGG	TGCCAGTACC	AGGGCTAGAG	GCCAGAAGGA	GTGGAGGAAG	50200
GAGAGGGTGA	CAGGCTTTCT	GTGTCTTCTT	CTTAAGCATA	GGAAACTGCC	
CCCGAAGCAC	TAGCAAATCC	CTTCCGGGTT	CTCATTGGCC	TGAAATGTAT	50300
CCCACCCCTA	AGCCÁGGGGT	GGAGTCAGCT	TCCCCAAGGC	GATGGTCCTG	50400
TGGGTGAGTG	GGTGGGGTTT	GCCTGAGCAA	GATGAGAGTT	CTCTAGGTAG	50400
GAGAAAGGGG	GATTATAGGT	CCTGTCTAGA	AGAGAAGGTC	TGAGGGTCCT	
TGCTTTTCCA	GGGACTCTGG	AATCTAGTGT	TGGCTTTGAA	TCCTGACTCT	50500
GCCACTCACT	GGCAGTGTGG	ACTTGAGCAA	GTTGCTTAAT	TCTCTGAGCC	
TCAGTTTCCT	CTTGTGGGTT	ATAACAGTGT	TTACCTGGTA	GGACAGATAT	50600
TGGAATTTAT	TGAGACAATA	CATATAAAGT	GCATATTCCA	GCCTCTTGCA	
AATACCAAGT	GCCATTTATG	TATCAGTTAG	TGTTTGCTGT	GTAACAAATG	50700
ACCCCGAAAT	GTAGAGGGTT	ACAACAACTT	TATTTAGCTT	ATGCTTCTGC	
AGGCTGGCAT	TTGGGGCTGG	GCTCAGCAGT	GAGGGTGGCG	GGGGAGGCTG	50800
GGCTGGGCTG	GGCTGGGCAG	ATCTGAATTG	AGCTGACCCG	TCCCCGTAGC	
CTCCCTCCGT	GTCTGACAGT	TGGCTTTTTT	TTTTTTTTC	TTTTTCTGAG	50900
ACGGAGTTTT	GCTCTTATTG	CCCAGGAGTG	CAATGGCATG	ATCTTGGCTC	
ACTGCAACCT	CTGCCTCCTG	GGTTCAAGCA	ATTTTCTTGC	CTCAGCCTCC	51000
CAAGTAGCTG	GGATTACAGG	CATGTGCCAC	CACGCCAGGC	TAATTTTGTA	
	AGATGGGGTT	TCTTCATGTT	GGTCAGGCTG	GTCTGGAACT	51100
CCTAATATCA		CCACCTCAGC	CTCCCAAAGT	GCTGGGATTA	
CAGGCGTGAG	CCACTGCACC	CAGCCTAGTT	GGCTGACTTT	TACCTGGGAC	51200
	CCTGAGCCAT	GTGCCTCTCA	CTCTCCAGCA	GGCCGGCCCA	
AGTGCAGGTG		CAGTTTTCAA	GGGTGGGAAG	TCCCAAGGCT	51300
GGCTTGTTTA	TAGGCGCAGC	ACTGGCATGA	TATCACTTCC	ATCACATTCT	
TCTTGAGGCC			AGATTCAAGG	GATGGGAGGA	51400
ATGGGCCCAA	ACTCCTCTGT	GGCCACTTTT	GCCATCGACC	ACAGTCCCTG	
GATTCAGAGC	GACAATGTAA		GGAATCTGAG	GCTCAGAAAG	51500
TAAATATTAG		TCTGATCTGT	GTGATGTCGA		
CGTAAGTGAC	-	CTCCAGGCCG	GGCTGCAAGG	CCACTCTGCT	51600
CCTTCCTGAG	CTGTCTCTGT			AGAAGCGGTC	
			ICACAGIGGG	HOLLIOCOCIO	
[exor	10: 51628.	* C T C C C C C T T	пстателстал	CTTACCTCAC	51700
CCGAGGCCAG			TGTATCTGAA	C11110010110	01.00
	516		TCCACACCCA	A CCCCCTACC	
AGCCTGCATG	CATTGGGAAG	GIGAIAGAAI	TGGAGAGGCA	TCTCACATTA	51800
TCCATGTCTG	CCTTCTCTTC	CCTGCATTCG	TCTCC A A A CC	TGTGACATTA	31000
GCCTTCAAGG	GACGGCAGGA	GGAGGGTGT	A CCTA CATTCC	TGGACTGCTG	51900
GCCAAGCCCC	CTGAGTTTCA	CTGGTGTGTC	AGGTACATGG	TCTTCTTAAA	31300
TGGGAGTGCT	GTTATAGTTA	ACAACCAGAG	CAGCCGIGCC	TGTTGTTAAA	52000
ATCTTGACCT	AATTGTATAC	TTGTCGGCAA	AIAGCCACIA	TCCTGAACAC	32000
TCCCCTCCTT	TTTTTTAATA	TACAGGATCT	CACICIGIGG	CCCAGGCTGG	52100
TGTGCAGTGG	TGCGATCATA	GCTCACTGCA	CCTTCAAACI	CCTGAGCTCA	52100
AGTGATCCTC	CCATCTTAGC	: CTCCCGAGTA	GCTGATACTA	CAGATGTGCA	52200
TTACCACGCC	: TGGCTATTTT	' AAAAGGTTTT	TGCCTGTAAT	TCCAGCTACT	32200
CAGGAGGCTG	AGGCATGAGA	ATCACTTGAA	CCCGGGAGGC	AGAGGTTGCA	52300
GTGAGCGCAG	ATTGTGCCAC	TGCACTCCAG	CCTGGGCGAC	AGAGTGAGAC	32300
TCTTGTCTCA	AAAAAAAAA	TACCAAAAAA	AGTTTTTGTA	AAGACAAGCT	52400
CTCGCTGTGT	TGCCCCGCCA	CTGTGGCCTC	CTTAGCTTCT	TCCCTGGGGC	52400
CTGCTGGACC	: TTTCCATACT	CCAGAAACTA	AAGGGGG'I'CC	AGGACCCTGC	52500
TTCAACCCTA	GGATCCCGCA	TCTTTTTTT	TTTTTTTTTT	TTTTGGACGC	52500
AGGGTCTTGC	TGTGTCCCTC	CAGGCTGGAGT	GCAGTGATTC	ACTGCAGCCT	52600
CAAACTCGT	G GGCTCAAGTG	ATTCTCTAGO	CTCAGCCTTC	TAAGTAGCTG	52600

FIGURE 1I

			10/15		
CCACTACACT	CATACACCAA		TAATTTTCCT	TTTTTTTAAT	
	ATGTTTGAGA			AGGCTGTTCT	52700
	AGCTCAAGCG		CTCAGCCTCC	TAAAGTGCTG	
GGATTACAGG	CGTGAGCCAC	CGCACCCGGC	TTCCATATCC	TTTCTAATTG	52800
	GGGATAATGG	TGTTGCTTTT		ATCCATAAAG	
GTCATGGCTT		TCTGAGCTTG	TATTTGGTGC	CCAGGACATG	52900
11011111	ACTCAACAGA	AAAGACACAG	ACCCTACCCT	CAGGGATTTC	02300
TGCTGGGTTC	CCGAAATCCC	GATCAATTAC	TGATTATAAC	GTTAGAAGGC	53000
TCATTCTAGC		TCAGGACATG	GTGATTTCAG	0	33000
ATGTCTGAAG	TAGACAGCCA	TCAGGACAIG	GIGATITCAG	GCIGGGCIII	
C			7 7 7 CEC 7 7 CC	CTGACCAACC	53100
GAAGAATGAA	TAGGAGTTT	TCAAGTGTCG	AAACIGAACC	T	33100
				_	
		AAGAATTGTC	TTACCAAGCT	CTTGCCCTGT	
[exon	11: 53114.	•			
				7 C C C T C C C 7 7	E2200
TTTCTGGAGC	ACAACATGAA	AAGGGATGAA	GATCCTCACA	AGGCTGCCAA	53200
C					
AGAGATGCCT		CTGGAAAATC	AGCATGGTGC		
TCAGCAAGAC	AGTCCTCTGG	CCAGAGAGCA	TCAGCGTGGT	GCGATGTGTG	53300
GAGTTGTTTG	AGGCCCCGGT	GGAGTGTGAG	GAGGAGGAGG	AGGTAGAGGA	
	AGCTTCTGTG	CATCGCCTGA	GAGCAGCAGG	GATGACTTCC	53400
	GGAGGGCATT	GTGGCCCGGC	TAACAGAGAG	CCTGTTCCTG	
1100110001110	C				
CACCTCCTCG	GAGAGGAGAA	TGGGGGCTTT	TGCCAGCAGG	ACATGGGGGA	53500
T	01101100110111	100000111			
GTCATGCCTT	CTTCCACCTT	CGGGAAGTAC	GAGTGCTCAC	ATGCCCTGGG	
C T	C	CGGCHAGIIIC	011010010110	111 00 00 1 0 0 1	
	-	CCCAAGGAGG	CACCTCCCTC	GGGCAAGGAG	53600
	AAGTGCAGGG			CCCAGAGTCC	0000
	ACCTGGAGCC	AAGTCCTCCT		GGCAACCCTG	53700
	ACTTGCACAG	AGACGCCCCT		TCCCAGAGAG	33700
CTTACCGCAG	CTTCAGCAAC	TCCCTGAGCC	AGTCACCGTG	ICCCAGAGAG	
		C	amaan aan na	ma	53800
CTGGGTCCAG	ACCCACTGCT		CTGGAGGAAG	TAGAACCCGA	23600
GATGCCCTGT	GTCCCCCAGC	TCTCTGAGCC	AACCACTGTG		F2000
AGCCAGAAAC	CTGGGAGCAG	ATCCTCCGCC	GAAATGTCCT	CCAGCATGGG	53900
GCAGCTGCAG	CCCCCGTCTC	GGCCCCCACC	AGTGGCTATC	AGGAGTTTGT	
	${f T}$			G A	
ACATGCGGTG	GAGCAGGGTG	GCACCCAGGC	CAGTGCGGTG	GTGGGCTTGG	54000
GTCCCCCAGG	AGAGGCTGGT	TACAAGGCCT	TCTCAAGCCT	GCTTGCCAGC	
AGTGCTGTGT	CCCCAGAGAA	ATGTGGGTTT	GGGGCTAGCA	GTGGGGAAGA	54100
GGGGTATAAG	CCTTTCCAAG	ACCTCATTCC	TGGCTGCCCT	GGGGACCCTG	
CCCCAGTCCC	TGTCCCCTTG	TTCACCTTTG	GACTGGACAG	GGAGCCACCT	54200
CGCAGTCCGC	AGAGCTCACA	TCTCCCAAGC	AGCTCCCCAG	AGCACCTGGG	
00011010000	11011001		${f T}$		
тстссъссс	GGGGAAAGG	TAGAGGACAT		CCACTTCCCC	54300
		CTTGTGGACA		TGGCATTGTC	
	* TTACCTCCA	CCTGTGCGGC		AGTGTCATGG	54400
TACTCAGCCC	CCTCCCCACA	. CC1G1GCCAM TCCCCTCTCAM	GGCCAGTCCT	TGCTGTGGCT	
CCAGGAGGAT	ADADDDIDD Component	THE	CVVCCCCC	GAGGGCCCCA	54500
GCTGCTGTGG	AGACAGGICC G	. ICGCCCCIA	CAACCCCCI	3113333333311	0 2 2 3 0
03 0000m0m0		, шсс <u>ле</u> тееле	: CCCACTCTCT	GTCCGGCCTC	
GACCCCTCTC	. CAGGTGGGT	LCCACIGGAC	· UCCVGTCTGT	#CZ#CC##CC	54600
CCTGGCACCC	: TCGGGCATC1	DAJAAJAAJA	CCCACACCC	TCATCCTTCC	54000
ATCCTGCCCC		CAGAGCTCAA	COUNTROPORT	CAAAATCGTG	
	С				

FIGURE 1J

7 7 CEEEE CE CE	a acimos e e e e		11/15		
AACTTTGTCT	CCGTGGGACC	CACATACATO	AGGGTCTCT1	AGGTGCATGT	54700
	5.4			C C	
ССФСППСППС	540				
CCICITGIT	- CTGAGTCTGC	AGATGAGGAC	TAGGGCTTAT	CCATGCCTGG	
CNNNTCCCNC		007000700		T	
GAAATGCCAC	CTCCTGGAAG			CCAAAAGACT	54800
ጥር እ እ ር እ እ ር ር እ		G			
CTCCCCTCCA	TGGTATGAAG	GTGATTGGCC	CCACTGACGT	'TGGCCTAACA	
TCCCATCACA	GAGACTGGAC	CCCGCCCAGC	ATTGGGCTGG	GCTCGCCACA	54900
CCACCAAAA	GTAGAGGGCA	CTGGGTCGCC	GTGCCCCACG		
GUAGGAAAAC	TGAGGCCCTT	GGGCACCTCG	ACTTGTGAAC	GAGTTGTTGG	55000
CTGCTCCCTC	CACAGCTTCT	GCAGCAGACT	GTCCCTGTTG	TAACTGCCCA	
AGGCATGTTT	TGCCCACCAG	ATCATGGCCC	ACATGGAGGC	CCACCTGCCT	55100
OM CM CM CM CM	G3.7.6==		G		
CTGTCTCACT	GAACTAGAAG	CCGAGCCTAG	AAACTAACAC	AGCCATCAAG A	
GGAATGACTT	GGGCGGCCTT	GGGAAATCGA	TGAGAAATTG	AACTTCAGGG	55200
AGGGTGGTCA	TTGCCTAGAG	GTGCTCATTC	ATTTAACAGA	GCTTCCTTAG	33200
GTTGATGCTG	GAGGCAGAAT	CCCGGCTGTC	AAGGGGTGTT	CACTEAACCC	FF200 .
GAGCAACAGA	GGACATGAAA	AATTGCTGTG	ACTABAGCAG	CCACAARTEC	55300
		A	ACIAAAGCAG	GGACAATITG	
CTGCCAAACA	CCCATGCCCA		TGGGGGGGTGG		F F 400
GGAACCCCCA	GAATAAATAT	GCTCAGCCAC	CCTCTCCCCC	CCCCAAMCCA	55400
		T	CCIGIGGCC	GGGCAATCCA	
GACAGCAGGC	ATAAGGCACC		САТСТТСССС	CACACCTCAC	55500
GTGCTAGGGA	AGGCGGGAAC	CTTGGGTTGA	GTA ATCCTCC	TCTCTCTCTCTT	55500
		011000110/1	T	ICIGIGIGII	
TTAGTTTCAT	CACCTGTTAT	CTGTGTTTGC	_	GGAACAGAAG	55600
		AAAGTTTCTT		TTTTTTATGT	33600
ATTAACCAAA	CATACCTCCA			GTCTCTGTTA	F F 7 0 0
	TTCACCCATC		AGGATGCAAG	ACCUENACAA	55700
ACTTGCCGTC	TGGGTTTGGG	TTCCCCATAC	AAGGATTCAA	AGGIIAAGAA	F F O O O
A		110000111110	THIOOMITCAM	AIAGIIGAII	55800
TAGGAAGTAA	TCCCGGGAAA	CCCTGCTAAG	GTAGTGGGGA	Λ CTC Λ CCC Λ C	
GGAAGGACAC	AAACCAAGAA	AGTGTTACCT	GAAAGGGGTC	CACATCCACA	E E O O O
CCCCAAAAGA	GGGTTCTTGA	ATCTCATGCA	ACAAACAATT	CAGAIGCAGA	55900
CCATAGAGTC	AGTGAAAGCA	AGTTAATCAC	CANACTANAC	CAGAGCGAGI	F 6000
ATGGCTACTC	CGTAGACAGA	GCAGCCCTGA	CCCTTCCTCC	CTCCCTATTT	56000
TTATGGTTAT	TGATTAATTA	TATTCCAAAC	AACCCCTCCA	CIGCCIATTI	5.61.00
TCCCTTTTAG	ACCATATAGG	GTAACTTCCT	CATCTTCCCA	TCCCAMMMC	56100
AAACTGTCAT	GGCGCTGTTG	GGAGTGTAGC	ACTGACCACA	ACCACACCEC	F 6000
ACTCTTGTTG	CCATCTTGGT	TTTGGTGGGT	TACACCCATC	ACCAGAGGIC	56200
CAACCTGTTT	TATCAGCAAG	CTCTTTATCA	CTTCTATCCC	TICTITACTG	<i></i>
	CTATGACTAA	GAATCCCCTA	ACCTCCCACC	TGACGACCTC	56300
AGTAAGTCTC	AGCCTCATTT	TACCCACCCC	ACCICCOAGG	AATGCAGCCC	
AATAAACCTC	TGACAAAAGG	CTCACTTATT	CACACAGA	CTCCAGTTTA	56400
TAACTGATGC	TTACCTCCCC	CCCATCTCTC	CAACAGATTA	CCAGCATGAG	
GCCCACTTAT	TTACCTGCCG	CACACCCACC	TCCCCTA TOTAL	CATGGCACAT	56500
TCCCATCTAL	GCCTGCAAAG	CACCECCEEC	1GGGGTATTT	GTCCACCAGC	
CDCTTCCGI	CATTGGCTGA	GAGCTGCTTC	CAGGAGCATT	AATTCTCCAG	56600
CTCTTCCAGC	TACTCCAGGA	TAAAAAAAAT	TCTTCAACTG	AGAGTTGGAG	
TCCCTCNTCNTCN	ACTCTGGCAC	ACCAAGAAGA	CAGGAACAGG	ACACCAACAG	56700
TACTICATION	TACACTGCCA	AGGTCACACA	GCTAGTTAGC	AACAGATCTA	
CCCCEECTO	CAGACAGTGT	CTCCATCACC	CAGGCTCTCT	GTAGTGATCT	56800
GUGUTTUAUA	TCCGAGGCAG	GCAGAGGGAT	GGTGTGGGCC	TTAGATGGGA	

FIGURE 1K

			12/15		
AGGCTGGGAA	CCTGAAGCTC	CTATGTCTGT	ATCACTTTTG	CTTCTCTGAG	56900
TAGCTGCCCT		TTGAGGGGCT	TGGCCATTTT	AGATTCCTTC	
CTGCTCTAGG		CTACACTGGĂ	AATGATGGGG	AGCTCTCTAC	57000
CTCACATGCA		TGTTAGAAAC	ACCTCCTTGC	GCCAGGCATG	
ATGGCTCATG	GCTGTAATCC	CAGCAATTTG	GGAGGCTGAG	GCGGGTGTAT	57100
CACTTGAGGT	GAGGAGTTCA	AGACCAGCCT	GGCCAATATG	GTGAAACCCT	
ATCTCTACCA	AAAATAAAA	AATTAGCCGG	GTGTGGTGGT	GGGTGCCTGT	57200
AATCTCAGCT	ACTTGGGAGG	CTGAGTTGGT	AGAATTGCTT	CAACCTGGGA	
CGCGGAGGTT	GCAGTGAGCT	GAGATTGTGC	CATTGCACTC	CAGCTTGGAT	57300
GACAGAGTGA	GACCCTGTCT	CAGGAAAAAA	AAAAAAAAAC	AAAAAAAACC	
TTGTTCTAAG	CCAAAATCAA	TCCCTTTAGC	TGCCCAAATC	ACACAGTTTA	57400
CAGATGGAGA	AACAGTTTTA	GAGAGGAAAA	GGGACTTGCC	CAAAGTCACC	
CAGAGAATGG	011011000	ACTAGCCTTC	TGGACTTCTT	GCCTCCAAAA	57500
GCTCTTTATA	ATAAAATATA		AAAATAGTTA	TCTGTTTAGG	
	ATGCTAAGTG	CCGTCCAGCC	ACTGTGTCAT	TTACGTCTCC	57600
AAACAGCTCT	AGTTGGGAGG	CTCAATGATT	ATCCCAATTT	TACAGATAAG	
GAAACAGGTC	CAGAGAGGTT	GAGGATTAGC	CTAGAACCAC	ACAGCTAGGA	57700
AATCCTGGAG	CCAGGATTTG	AACCCGGGTC	TGACCTAAGA	GCTCCCAGCC	
GCCGTGATAT	ATCAGCTTAT	GTCATCCTGA	CACCTACGCA	GATGTCGGCT	57800
CGAATCCACT	TTGCCTGAGC	ATTGTCTCAG	AGAAATCTAA	TTTAAAAATT	
AGGCAGCAAA	TAGAAAATAT	ATTTGACTGC	TAGAGATGCA	ATGGGACTGG	57900
GAGCCCAACA	AAGGATCTTA	GGCAAAAGAA	ATCCAAGTTG	TTGGCCTCAG	50000
CAACTATTAC	TGAACTGGCT	GGGCTTTGGG	AAGCTACAGA	GGGATGAGAA	58000
GACCTGGTGG	ATCAGGTGGG	CCCAACTCAG	GCTGGCCCCC	ACCCTGCAGG	F0100
AAGTAGGAAA	AGTCCAGGGT	CATAGGCCCA	GTGAGATGCC	GGCTGCGGGA	58100
GTTTCAGCCT	CCGGGGCTGG	ACCAGAGGGC	AGGAGGGGAC	GCCCCTGGGT	F0000
AGCAGCGCCA	GAGTGGGCTG	AGTGGCCTGG		GGGAGCTTTC	58200
AGAGATGTTG	ATTTGGGGGT	ACTCCCTCAG	CCCTGCCTTT	ACACAGAATT	E0200
TGTGGGGGAT	GAGGGGAGGG	GGAAAGGGGG	GAGGAAGGCA		58300
CTGAATTTTT	TTTTTTTTT	TACAAAAAGT	GGCTTATTGC	ATTTTTCTGA	58400
TTACTCTATC	AGCACGTGCA	GACCTTTTCC		AAGCCTGAAG	36400
ATATAAAGAG		AAAAACCACC	GGAAATCCCA		58500
AGCATCTGGC	ACTGTGTGGG	CGATCACGAA		GTTTTTGAAG	36300
GCGTAGTATC	TCCGTGAACA	TCCGGTTGAA		GACTTTATTT ACCGAAAAAA	58600
	AGTTATTAAT	TAAAAAACAA			30000
CAAAAAACCC	AGCAAGTGTT	TGAGCTCCCA		GGCCIGACGI	58690
CACTGGATCC	TCCCGGCAGC	CGATGAGGCT	GCAIGGGACT		30090

\$13/15\$ polymorphisms in the coding sequence of il4r $\!\alpha$

ATGGGGTGGC	TTTGCTCTGG	GCTCCTGTTC	CCTGTGAGCT	GCCTGGTCCT	
GCTGCAGGTG	GCAAGCTCTG	GGAACATGAA	GGTCTTGCAG	GAGCCCACCT	100
GCGTCTCCGA	CTACATGAGC	ATCTCTACTT	GCGAGTGGAA	GATGAATGGT	
CCCACCAATT	GCAGCACCGA	GCTCCGCCTG	TTGTACCAGC	TGGTTTTTCT	200
GCTCTCCGAA	GCCCACACGT	GTATCCCTGA	GAACAACGGA	GGCGCGGGGT	
		G	T	A	
GCGTGTGCCA	CCTGCTCATG	GATGACGTGG	TCAGTGCGGA	TAACTATACA C	300
CTGGACCTGT	GGGCTGGGCA	GCAGCTGCTG	TGGAAGGGCT	CCTTCAAGCC	
CAGCGAGCAT			AAACCTGACA		400
*	CACTCTGCTG	CTGACCTGGA	•		
AATTACCTGT	ATAATCATCT	CACCTATGCA			500
	GATTTCAGAA	TCTATAACGT	GACCTACCTA		000
T	01111110110111	101111111001	0110011100111	01210001000	
	AGCCAGCACC	CTGAAGTCTG	GGATTTCCTA	CAGGGCACGG	600
•	GGGCTCAGTG	CTATAACACC	ACCTGGAGTG	AGTGGAGCCC	
CAGCACCAAG	TGGCACAACT		GCCCTTCGAG		700
•	CAGCGTTTCC	TGCATTGTCA		CTGCCTGTTG	, 5 5
	GCATCACCAA	GATTAAGAAA	GAATGGTGGG	ATCAGATTCC	800
CAACCCAGCC		TCGTGGCTAT	AATAATCCAG	GATGCTCAGG	000
*	GGAGAAGCGG	TCCCGAGGCC	AGGAACCAGC	CAAGTGCCCA	900
	ATTGTCTTAC		CCCTGTTTTC		200
C/10100/11/0/1	111101011110	02410010110	C	1 001100110111	
CATGAAAAGG	GATGAAGATC	CTCACAAGGC	TGCCAAAGAG	ATGCCTTTCC	1000
	AAAATCAGCA	TGGTGCCCAG	TGGAGATCAG		
	AGAGCATCAG	CGTGGTGCGA	TGTGTGGAGT	TGTTTGAGGC	1100
	TGTGAGGAGG		AGAGGAAGAA	AAAGGGAGCT	
	GCCTGAGAGC		ACTTCCAGGA		1200
				C	
GGCATTGTGG	CCCGGCTAAC	AGAGAGCCTG	TTCCTGGACC	TGCTCGGAGA	
	0000011111			T	
GGAGAATGGG	GGCTTTTGCC	AGCAGGACAT	GGGGGAGTCA		1300
				C T C	
CACCTTCGGG	AAGTACGAGT	GCTCACATGC	CCTGGGATGA	GTTCCCAAGT	
GCAGGGCCCA	AGGAGGCACC	TCCCTGGGGC	AAGGAGCAGC	CTCTCCACCT	1400
GGAGCCAAGT	CCTCCTGCCA	GCCCGACCCA	GAGTCCAGAC	AACCTGACTT	
GCACAGAGAC	GCCCCTCGTC	ATCGCAGGCA	ACCCTGCTTA	CCGCAGCTTC	1500
AGCAACTCCC	TGAGCCAGTC	ACCGTGTCCC	AGAGAGCTGG	GTCCAGACCC	
С					
ACTGCTGGCC	AGACACCTGG	AGGAAGTAGA	ACCCGAGATG	CCCTGTGTCC	1600
CCCAGCTCTC	TGAGCCAACC	ACTGTGCCCC	AACCTGAGCC	AGAAACCTGG	
GAGCAGATCC	TCCGCCGAAA	TGTCCTCCAG	CATGGGGCAG	CTGCAGCCCC	1700
CGTCTCGGCC	CCCACCAGTG	GCTATCAGGA	GTTTGTACAT	GCGGTGGAGC	
T		G	A		
	CCAGGCCAGT	GCGGTGGTGG	GCTTGGGTCC	CCCAGGAGAG	1800
		AAGCCTGCTT			
		CTAGCAGTGG			1900
		TGCCCTGGGG			
		GGACAGGGAG			2000

			14/15		
CTCACATCTC	CCAAGCAGCT	CCCCAGAGCA	CCTGGGTCTG	GAGCCGGGGG	
		T			
AAAAGGTAGA	GGACATGCCA	AAGCCCCCAC	TTCCCCAGGA	GCAGGCCACA	2100
GACCCCCTTG	TGGACAGCCT	GGGCAGTGGC	ATTGTCTACT	CAGCCCTTAC	
CTGCCACCTG	TGCGGCCACC	TGAAACAGTG	TCATGGCCAG	GAGGATGGTG	2200
GCCAGACCCC	TGTCATGGCC	AGTCCTTGCT	GTGGCTGCTG	CTGTGGAGAC	
AGGTCCTCGC	CCCCTACAAC	CCCCTGAGG	GCCCCAGACC	CCTCTCCAGG	2300
G					
TGGGGTTCCA	CTGGAGGCCA	GTCTGTGTCC	GGCCTCCCTG	GCACCCTCGG	
GCATCTCAGA	GAAGAGTAAA	TCCTCATCAT	CCTTCCATCC	TGCCCCTGGC	2400
				С	
AATGCTCAGA	GCTCAAGCCA	GACCCCCAAA	ATCGTGAACT	TTGTCTCCGT	
GGGACCCACA	TACATGAGGG	TCTCTT			2476

15/15 ISOFORMS OF THE IL4R α PROTEIN

	DIZGGITZI I OTZ	TO CONTINUES IT	EPTCVSDYMS	TSTCEWKMNG	
	PVSCLVLLQV			DDVVSADNYT	100
PTNCSTELRL	LYQLVFLLSE	AHTCIPENNG	GAGCVCHLLM	DDAASADNII	100
		V	T		
LDLWAGQQLL	WKGSFKPSEH	VKPRAPGNLT	VHTNVSDTLL	LTWSNPYPPD	
NYLYNHLTYA	VNIWSENDPA	DFRIYNVTYL	EPSLRIAAST	LKSGISYRAR	200
		*	H		
VRAWAOCYNT	TWSEWSPSTK	WHNSYREPFE	QHLLLGVSVS	CIVILAVCLL	
CYVSITKIKK	EWWDQIPNPA	RSRLVAIIIQ	DAQGSQWEKR	SRGQEPAKCP	300
HWKNCLTKLL	PCFLEHNMKR	DEDPHKAAKE	MPFOGSGKSA	WCPVEISKTV	
LWPESISVVR		CEEEEEVEEE	KGSFCASPES	SRDDFOEGRE	400
TMLEDIZAAV	CVEDITALVE		1.001 0110 0 = 1	~ A	
OTTEN DI MEGI	DI DI I CEENC	GFCQQDMGES	CLLPPSGSTS	AHMPWDEFPS	
GIVARLTESL	FLDLLGEENG	GICQQDMGES	R	7MHH WOLL C	
				TAGNPAYRSE	500
AGPKEAPPWG		PPASPTQSPD	NLTCTETPLV		500
SNSLSQSPCP	RELGPDPLLA	RHLEEVEPEM	PCVPQLSEPT	TVPQPEPETW	
P					
EOILRRNVLQ	HGAAAAPVSA	PTSGYQEFVH	AVEQGGTQAS	AVVGLGPPGE	600
-2 -		R I			
AGYKAFSSLL	ASSAVSPEKC	GFGASSGEEG	YKPFQDLIPG	CPGDPAPVPV	
PLFTFGLDRE	PPRSPQSSHL	PSSSPEHLGL	EPGEKVEDMP	KPPLPQEQAT	700
FILLEGIDIG	I I KOI QUUIL	S			
DDI TIDGI CCC	TYVCATECUT		EDGGQTPVMA	SPCCGCCCGD	
DPLVDSLGSG	IVYSALTCHL			SSSSFHPAPG	800
RSSPPTTPLR	APDPSPGGVP	LEASLCPASL	ALOGIOEVOV	Dabbettere	000
A					005
NAQSSSQTPK	IVNFVSVGPT	YMRVS			825